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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,095	12/01/2005	Marianne Hofmann	008312-000006	1462
30565 7590 05/25/2010 Woodard, Emhardt, Moriarty, McNett & Henry LLP 111 Monument Circle, Suite 3700 Indianapolis, IN 46204-5137				
EXAMINER				
HOEY, ALISSA L				
ART UNIT		PAPER NUMBER		
3765				
NOTIFICATION DATE		DELIVERY MODE		
05/25/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketDept@uspatent.com

### Office Action Summary

**Application No.**

10/559,095

**Applicant(s)**

HOFMANN, MARIANNE

**Examiner**

Alissa L. Hoey

**Art Unit**

3765

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 22, 25-28 and 31-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22, 25-28 and 31-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/28/10 has been entered.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 22, 27, 28, 32, 35, 37, 39 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Pampuch (US 4,174,710).

Pampuch teaches the following:

22. A hood, in particular for a clothing item for protective and military purposes, such as an NBC protective suit, said hood (4) comprising:  
a hood body (4) having a peripheral edge defining a face opening (see figure), said face opening being constructed and arranged for receiving a respirator (1);  
a peripheral elastic hem (5)

attached to said peripheral edge (see figure 1: identifiers 4 and 5), said peripheral elastic hem being constructed and arranged to extend around said face opening (see figure, identifier 5), said peripheral elastic hem (5) having an inner face and an outer face (see figure); and a plurality of peripheral sealing elements conjoined to the inner face of said peripheral elastic hem (see column 2, lines 12-16), said plurality of peripheral sealing elements comprised of elastofibers and being constructed (inherent due to elastic material construction), and arranged for abutment against and around the respirator received by said face opening (see figure and column 2 lines 12-16), wherein the individual sealing elements are in substantially parallel arrangement with each other (column 2, lines 12-16). Further, Pampuch teaches wherein the sealing elements abut the respirator linearly (column 2, lines 12-16: see figure 1) and the sealing elements project or protrude from the hem (column 2, lines 12-16). Further, Pampuch teaches the sealing elements being constructed and arranged for closeout abutment against the respirator (see column 1, lines 67-68 through column 2, lines 1-11).

27. The hood according to claim 22, wherein the sealing elements are each configured as one of the forms selected from the group consisting of a sealing ring, as a sealing lip or as a sealing protrusion (column 2, lines 12-16).

28. The hood according to claim 22, wherein the sealing elements are constructed and arranged as one of the structures selected from the

group consisting of thread-shaped, ligament-shaped, string-shaped or strip-shaped or webbed-shaped or honeycomb-shaped (figure 1; column 2, lines 12-16).

32. The hood according to claim 22, wherein the elasticity of the sealing elements would inherently corresponds at least essentially to the elasticity of the hem (column 2, lines 12-16).

35. The hood according to claim 22, wherein the hood including the face opening comprises, on the side portion of face opening, a fastener (see figure).

37. A clothing item, in particular for protective and/or military purposes, such as an NBC protective suit (4) or the like, comprising a hood as defined in claim 22 (4).

39. A clothing item, in particular for protective and military purposes, such as an NBC protective suit or the like, said clothing item comprising: a clothing body (4) defining at least one opening for a body part, such as a hand, arm, foot, leg or head (see figure); having a peripheral elastic hem (5) attached to said clothing body (column 1, lines 58-62), said peripheral elastic hem (5) being constructed and arranged to extend around said opening (figure 1), the opening being provided for receiving a further clothing item or an equipment article (see figure 1; identifier 4 and 1), said peripheral elastic hem (5) having an inner face and an outer face and a plurality of peripheral sealing elements which are conjoined with the to the inner face of said peripheral elastic hem said plurality of peripheral sealing elements comprised of

elastofibers (inherently, due to elastic material construction) and being constructed and arranged\_for abutment against and around the further clothing item or equipment article, wherein the individual sealing elements are in substantially parallel arrangement with each other (column 2, lines 12-16). Further, Pampuch teaches wherein the sealing elements about the respirator linearly (column 2, lines 12-16: see figure 1) and the sealing elements project or protrude from the hem (column 2, lines 12-16). Further, Pampuch teaches the sealing elements being constructed and arranged for closeout abutment against the respirator (see column 1, lines 67-68 through column 2, lines 1-11).

40. A method for closing out the transition between a portion of a clothing item (4) on the one hand and a further clothing item or equipment article (1) on the other hand by using an elastic hem (5), comprising the steps of:  
providing an elastic hem (5) having an inner face and an outer face;  
an joining said\_elastic hem to said clothing item (column 1, lines 58-62) wherein said elastic hem (5)\_faces the further clothing item or the equipment article;  
providing a plurality of sealing elements in the form of elastofibers (inherently, due to elastic material); and conjoining said plurality of sealing elements with the inner face\_of said hem for closeout abutment of the further clothing item or equipment article (see figure 1: column 2, lines 12-16).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 25, 26, 31, 33 and 34 rejected under 35 U.S.C. 103(a) as being unpatentable over Pampuch (US 4,174,710).

Pampuch teaches a garment as described above in claims 21 and 24. However, Pampuch fails to specifically teach the dimension the sealing elements project from the hem, the method of attaching the sealing elements to the hem, the sealing elements thickness in comparison to the hem, the extensibility of the sealing elements and the modulus of elasticity in stretching of the sealing elements.

In regard to claim 25, with respect to the sealing elements projecting or protruding from the hem by not less than 0.25 mm, preferably not less than 0.4 mm.

With respect to the sealing elements projecting from the hem by .4mm and .25mm. The specification contains no disclosure of either the critical nature of the claimed dimensions of any unexpected results arising therefrom, and that as such the dimensions are arbitrary and therefore obvious. Such unsupported cannot be a basis for patentability, since where patentability is said to be based upon the particular dimensions or another variable in the claim, the Applicant must show that the .25mm-.4mm protrusion of the sealing element from the hem is critical. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934 (Fed. Cir. 1990).

One having ordinary skill in the art would be able to determine through routine experimentation the ideal dimension for a particular application.

In regard to claim 26, with respect to the sealing elements being secured to the hem by using one of the securing methodologies selected from the group consisting of stitching, interweaving, adhering, stapling and welding. The specification contain no disclosure or either the critical nature of the claimed attaching methods or any unexpected results arising therefrom, and that as such the attaching methods are arbitrary and therefore obvious.

One having ordinary skill in the art would be able to determine through routine experimentation the desired attaching method from many known attaching methods in the apparel arts including stitching, interweaving, adhering, stapling and welding.

In regard to claim 31, with respect to the cross-sectional thickness of the sealing elements being not less than 1/4 of the cross-sectional thickness of the hem. The specification contains no disclosure of either the critical nature of the claimed dimensions of any unexpected results arising therefrom, and that as such the dimensions are arbitrary and therefore obvious. Such unsupported cannot be a basis for patentability, since where patentability is said to be based upon the particular dimensions or another variable in the claim, the Applicant must show that the thickness of the sealing element being not less than 1/4 of the cross-sectional thickness of the hem is critical. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934 (Fed. Cir. 1990).

One having ordinary skill in the art would be able to determine through routine experimentation the ideal thickness for the sealing element so that a good seal is



achieved between the garment and the respirator.

In regard to claim 33, with respect to the sealing elements having a relative elastic extensibility, based on their original length, of not less than 30 %. The specification contains no disclosure of either the critical nature of the claimed extensibility dimensions of any unexpected results arising therefrom, and that as such the extensibility dimensions are arbitrary and therefore obvious. Such unsupported cannot be a basis for patentability, since where patentability is said to be based upon the particular extensibility dimensions or another variable in the claim, the Applicant must show that the sealing elements having elastic extensibility of not less than 30%. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934 (Fed. Cir. 1990).

One having ordinary skill in the art would be able to determine through routine experimentation the ideal extensibility for a particular application.

In regard to claim 34, with respect to the material of which the sealing elements consist has, at 25 °C, a modulus of elasticity in stretching in the range of from 5.105 N.m<sup>2</sup> to 9.10 6 N.m<sup>2</sup>.

The specification contains no disclosure of either the critical nature of the claimed extensibility dimensions of any unexpected results arising therefrom, and that as such the extensibility dimensions are arbitrary and therefore obvious. Such unsupported cannot be a basis for patentability, since where patentability is said to be based upon the particular extensibility dimensions or another variable in the claim, the Applicant must show that the sealing elements are made from a material

that has a modulus of elasticity from 5.105Nm<sup>2</sup> to 9.10 6 N.m<sup>2</sup>. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934 (Fed. Cir. 1990).

One having ordinary skill in the art would be able to determine through routine experimentation the ideal modulus of elasticity for the sealing elements to create a good sealing effect.

6. Claims 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pampuch in view of Wood (GB 2,078,491).

Pampuch teaches a protective suit used with a respirator mask. However, Pampuch fails to teach a the hood having a liner.

In regard to claim 36, Wood teaches a protective garment with a hood, the hood (1) includes a liner (7) on its inside surface with an inside material, the inside material comprising a material selected from the group consisting of: (i) an adsorption-capable material on the basis of activated carbon, and (ii) a water-vapor-pervious, but gas-impervious barrier layer preventing or retarding the passage of harmful gases and liquids (page 1, lines 58-65).

In regard to claim 38, Wood teaches the clothing item includes a liner (7) on its inside surface with an inside material, the inside material comprising a material selected from the group consisting of: (i) an adsorption- capable material on the basis of activated carbon, and (ii) a water-vapor-pervious, but gas-impervious barrier layer preventing or retarding the passage of harmful gases and liquids (page 1, lines 58-65).

It would have been obvious to have provided the protective suit with respirator seal of Pampuch with the protective suit liner of Woods, since the protective suit of Pampuch provided with a liner, would provide even further protection to the user from the hazardous elements.

***Response to Arguments***

7. Applicant's arguments filed 04/28/10 have been fully considered but they are not persuasive.

**I) Applicant argues that Pampuch fails to teach a plurality of peripheral sealing elements, but a single sealing element.**

Examiner disagrees, since Pampuch teaches the elastic band element (5) that is capable of having laterally spaced ribs surrounding the inside surface, which would create a plurality of peripheral sealing elements (see column 2, lines 12-15). Laterally spaced ribs attached to an elastic band is illustrated and discussed by Pampuch to represent the ribs (7) on band (6). The disclosure of Pampuch teaches the use of ribs on the inside surface of the elastic band element (5) of the hood garment. These specific ribs are not illustrated in the figures, but that does not mean that that Pampuch does not teaches this limitation. The specification, claims and drawings are all elements of an invention that can be used to reject claims of limitation patent application. Therefore, Pampuch teaches the use of ribs on the inside of the elastic band (see column 2, lines 12-15).

In addition, Pampuch teaches the elastic band element (5) having an additional sealing element at the end of the elastic band (5a: thickened end) and another sealing

element next to the end of the elastic band (5c: groove). These two sealing elements (5a, 5c) can be interpreted as the plurality of peripheral elements (see figures).

**II) Applicant argues that Pampuch teaches the sealing element being a key/lock structure, while Applicant's sealing element does not require any interfit structure.**

In response to Applicant's argument that Pampuch includes additional structure not required by Applicant's invention, it must be noted that Pampuch discloses the invention as claimed. The fact that it Pampuch discloses additional structure not claimed is irrelevant.

**III) Applicant argues that even if Pampuch teaches ribs along the inner surface of the elastic band, the ribs would not form a "closeout" between the garment and mask.**

Examiner disagrees, since the ribs of Pampuch extending along the inner surface of the elastic band (5) interact with ribs (2, 2a) on the mask to seal the mask to the hood garment (see column 1, lines 67-68 through column 2, lines 1-16), both sets of ribs are sealing elements that interact with one another to form a gas-tight joint, which would be a securely and tightly sealed connection or a "closeout" connection.

**IV) Applicant argues that patents have been granted in other countries on the same claims prosecuted in this application.**

This argument is moot, since the claims pending before the U.S. Patent Office do not overcome the Pampuch reference.

**V) Applicant argues that there is no motivation to combine Pampuch (US 4,174,710) with Woods (GB 2 078 491).**

In KSR, the Supreme Court indicated that "[w]hen a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability." KSR Int'l v. Teleflex Inc., 127 S. Ct. 1727, 1740 (2007).

Here, where Pampuch teaches a protective suit with a head covering portion (4). The head covering (4) is connected to a face mask 1. Wood et al. (GB 2 078 491) teaches protective garment with a head covering portion (1). The head covering portions has an opening for connection to a mask. Additionally, Wood et al. teaches the head covering portion having a liner.

It would have been obvious to have provided the protective suit with respirator seal of Pampuch with the protective suit liner of Woods, since the protective suit of Pampuch provided with a liner, would provide even further protection to the user from the hazardous elements.

***Conclusion***

8. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to 3 whose telephone number is (571) 272-4985. The examiner can normally be reached on M-F (8:00-5:30)Second Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on (571) 272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alissa L. Hoey/  
Primary Examiner, Art Unit 3765